



UNITED STATES  
DEPARTMENT OF TRANSPORTATION

# United States Federal Radionavigation Plan (FRP)

*Infrastructure Update: Nationwide Differential GPS (NDGPS)*

## Space-Based PNT Advisory Board Meeting

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May 7, 2013

# Federal Radionavigation Plan

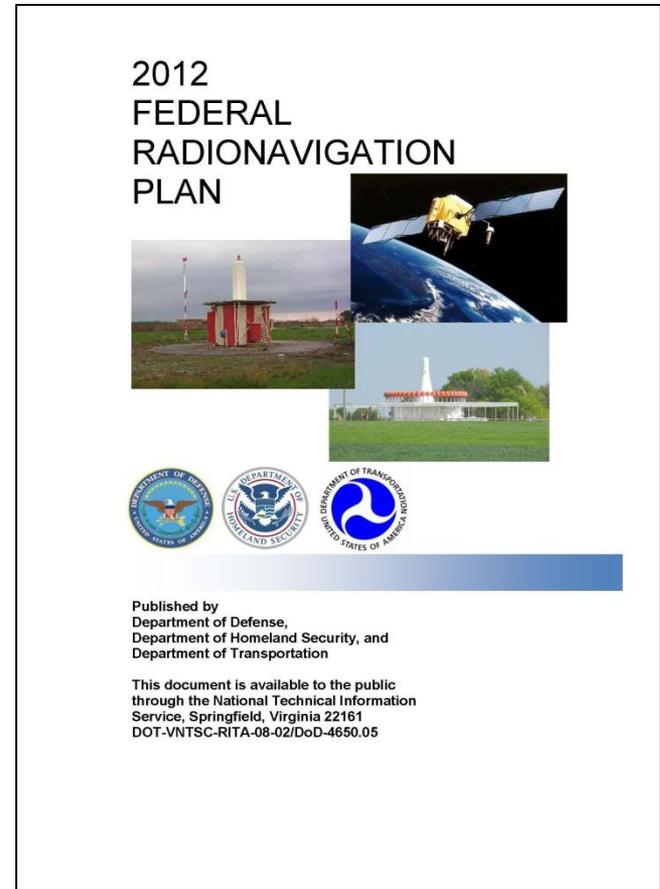
- Official source of radionavigation policy and planning for the Federal Government
  - Required by the National Defense Authorization Act for the Fiscal Year 1998 (10 USC 2281(c))
  - Jointly prepared by the Department of Defense (DoD), Homeland Security (DHS), and Transportation (DOT with the assistance of other government agencies
  - Signed by DOT, DoD, and DHS Secretaries



# 2012 Federal Radionavigation Plan

2012 FRP most recent version

- More emphasis on “planning”
- Incorporates civil PNT requirements (accuracy, availability, coverage, integrity)
- Incorporates National PNT Architecture concepts
- PNT Architecture Assessment and Evolution
  - FAA Alternative PNT
  - USCG CRADA on Timing Alternative to GPS
  - Interoperability and Compatibility with Foreign GNSS



[http://www.navcen.uscg.gov/pdf/2012\\_FRP\\_Final\\_Signed.pdf](http://www.navcen.uscg.gov/pdf/2012_FRP_Final_Signed.pdf)

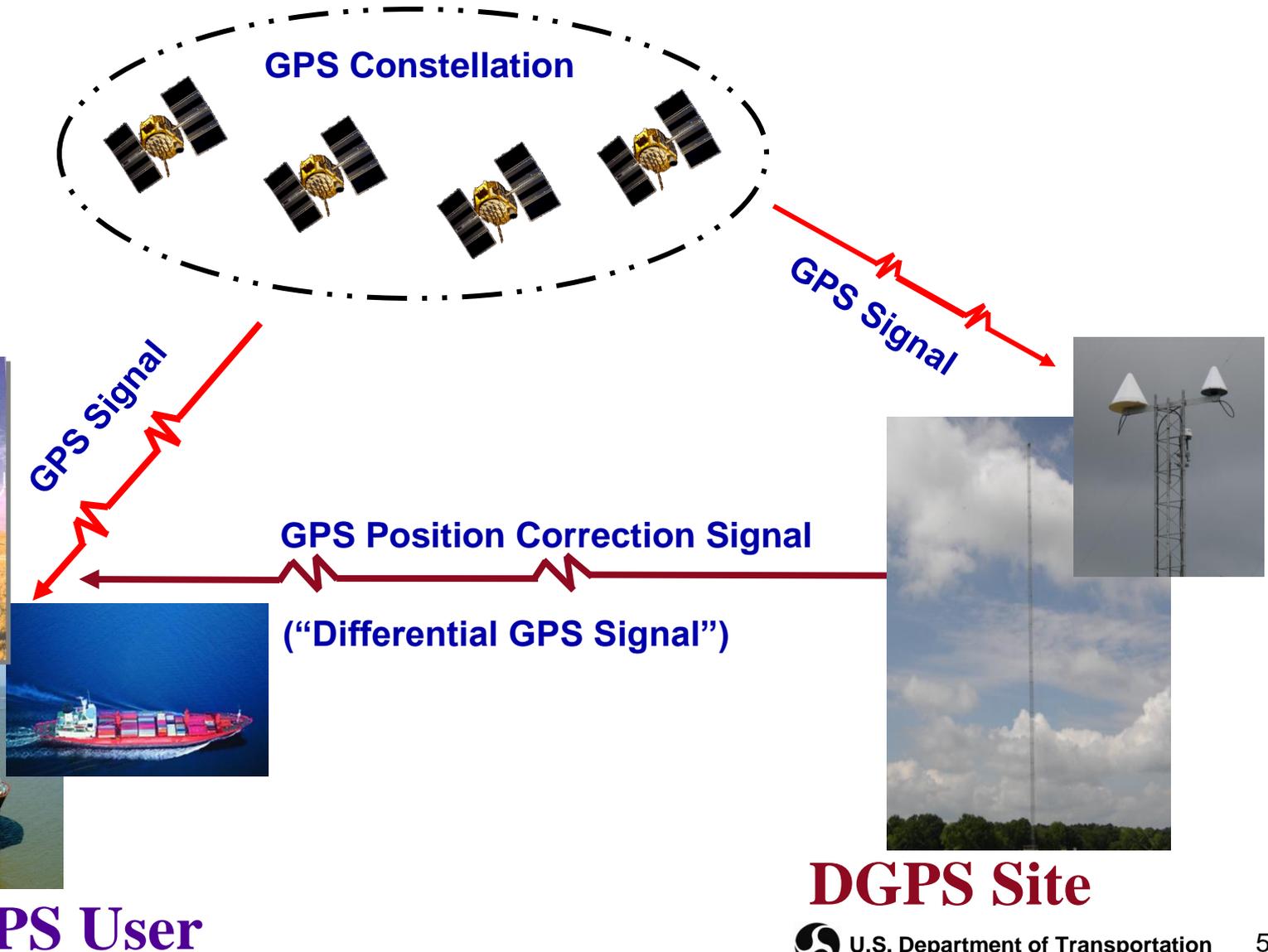


# 2012 FRP Language on NDGPS

- The Department of Homeland Security, in coordination with the Department of Transportation, is analyzing the future requirements for the NDGPS to support investment decisions beyond Fiscal Year 2016
- Future investment decisions might include:
  - Maintaining NDGPS as currently configured
  - Decommissioning NDGPS as currently configured
  - Developing alternate uses for the NDGPS infrastructure



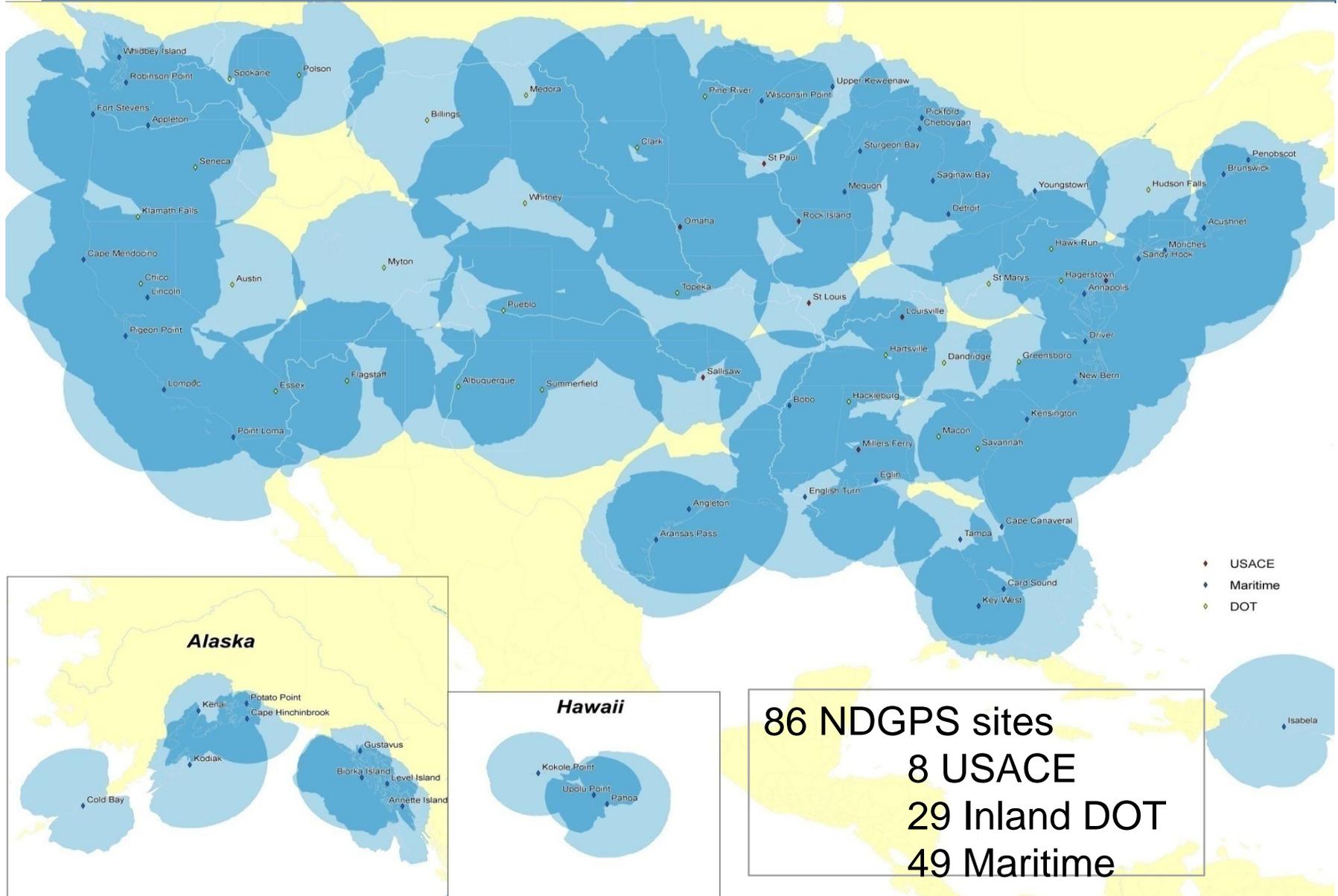
# NDGPS Operation



**DGPS User**

**DGPS Site**

# NDGPS Coverage Map



# National PNT Architecture Recommendation

“As GPS Modernization or other Methods Demonstrate New Operational Capabilities, Agencies should Transition or Divest US GNSS Augmentation Assets that are Unnecessarily Redundant to their Requirements.”



# Future of NDGPS Assessment

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- Contributing Factors:
  - Lack of USCG requirements
    - ATON authorized to use GPS for positioning
    - Navigation Standards Manual updated to allow use of WAAS for Navigation
  - Discontinuation of Selective Availability
  - Continued GPS modernization
  - Reduced availability of consumer grade DGPS receivers
  - FRA has stated that there is no requirement for NDGPS to meet Positive Train Control



# Federal Register Notice

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- Federal Register Notice issued April 16, 2013
- Requests comments from Federal, state, and local agencies, as well as other interested members of the public:
  - Current and future usage of NDGPS
  - Need to retain NDGPS
  - Impact if NDGPS signals were not available
  - Alternatives to NDGPS
  - Alternative uses for the NDGPS infrastructure
- Full Federal Register Notice can be found at:  
<http://www.gpo.gov/fdsys/pkg/FR-2013-04-16/pdf/2013-08844.pdf>
- Comments are due by July 15, 2013



# Next Steps

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- Spring-Fall 2013
  - Collect/Analyze user needs/inputs
  - Conduct public meetings
  - Coordinate with International Partner
- Information used to inform decision making process to continue/discontinue/develop alternate uses of NDGPS

